Operating a Robotic Arm with the Brain: A Case Study

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ABSTRACT

Invasive Brain Computer Interface (BCI) research on human subjects is being done in laboratories across the country. Research is focusing on evaluating safety of procedures and equipment, as well as to determine the best methods to use BCI to control a variety of devices. In this paper, a subject with quadriplegia who has undergone over 20 months of BCI training to operate a robotic arm will be described. Safety issues, the quality of life and satisfaction with the study, and the factors that have been involved to ensure success will be presented.

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